

International application No. PCT/JP03/03048

A. GLASSIFICATION OF SUBJECT MATTER Int.Cl ⁷ B24C5/06		
According to International Patent Classification (IPC) or to be	oth national classification and IPC	
B. FIELDS SEARCHED		
Minimum documentation searched (classification system following Int.Cl7 B24C5/06	owed by classification symbols)	
Documentation searched other than minimum documentation	to the extent that such documents are included	in the fields searched
Jitsuyo Shinan Koho 1926-19 Kokai Jitsuyo Shinan Koho 1971-20	96 Jitsuyo Shinan Toroku Kob 03 Toroku Jitsuyo Shinan Kob	no 1996–2003 no 1994–2003
Electronic data base consulted during the international search	(name of data base and, where practicable, sea	arch terms used)
		<u> </u>
C. DOCUMENTS CONSIDERED TO BE RELEVANT		
Category* Citation of document, with indication, whe		Relevant to claim No.
Y JP 6-179171 A (Showa Tans. 28 June, 1994 (28.06.94), Claims (Family: none)	an Kabushiki Kaisha),	1-9
<pre>Y JP 5-123969 A (Kashiwabara Ltd.), 21 May, 1993 (21.05.93), Claims (Family: none)</pre>		1-9
Y JP 61-257774 A (Mitsubish: Ltd.), 15 November, 1986 (15.11.8 Claims (Family: none)	i Heavy Industries,	1-9
Further documents are listed in the continuation of Box	C. See patent family annex.	
 Special categories of cited documents: "A" document defining the general state of the art which is not 	"T" later document published after the into	
"A" document defining the general state of the art which is not considered to be of particular relevance priority date and not in conflict with the application but cited to understand the principle or theory underlying the invention		
"E" earlier document but published on or after the international filing	g "X" document of particular relevance; the	claimed invention cannot be
"L" document which may throw doubts on priority claim(s) or which		•
cited to establish the publication date of another citation or othe	r "Y" document of particular relevance; the	claimed invention cannot be
special reason (as specified) "O" document referring to an oral disclosure, use, exhibition or other	considered to involve an inventive ste combined with one or more other such	
means "P" document published prior to the international filing date but late than the priority date claimed	combination being obvious to a person	n skilled in the art
Date of the actual completion of the international search 17 June, 2003 (17.06.03)	Date of mailing of the international sear 01 July, 2003 (01.0	ch report)7.03)
Name and mailing address of the ISA/	Authorized officer	
Japanese Patent Office	OCOT AVA	** ** CODY
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PCT/JP03/03048

Category*	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
Y	JP 59-93263 A (Kashiwabara Painting Works Co., Ltd.), 29 May, 1984 (29.05.84), Claims (Family: none)	6
Y	JP 54-79892 A (Toshiba Tungaloy Co., Ltd.), 26 June, 1979 (26.06.79), Claims (Family: none)	8
Y	JP 62-48463 A (Kawasaki Steel Corp.), 03 March, 1987 (03.03.87), Claims (Family: none)	9
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